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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/776,530

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Yu-Ru Lin

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EXAMINER

FLEURANTIN, JEAN B

ART UNIT

PAPER NUMBER

2162

NOTIFICATION DATE

DELIVERY MODE

03/19/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/776,530	<b>Applicant(s)</b> LIN ET AL.	
	<b>Examiner</b> JEAN B. FLEURANTIN	<b>Art Unit</b> 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6 and 9-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,5 and 6 is/are allowed.
- 6) ☒ Claim(s) 9-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/28/2008</u>  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/28/2008 has been entered.

This is status of claims:

Claims 4, 7 and 8 have been canceled.

Claims 1-3, 5-6 and 9-22 remain pending for examination.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 01/28/2008. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: “program logic code, when executed receiving audio data and a plurality of associated audio descriptors, which describe characteristic of said audio data, from an audio source connecting to said electronic apparatus; program logic code, when executed, receiving visual data and a plurality of associated visual descriptors, which describe characteristic of said visual data, from a video source connecting to said electronic apparatus”.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 20-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As set forth in MPEP 2106:

As per independent claims 20-22

The independent claims 20-22 are directed to computer-readable, editing system for audio/video, in which inputting visual data. The claimed steps are not being performed by any form of computer hardware component. Therefore, the mechanism for correlating the audio/video data and visual data as the purpose of the invention. The claimed, “system” fails to fall with one of four statutory categories of invention, process, machine, manufacture and composition, and is software per se.

The dependent claims are rejected under the same rational.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art, Figure 1, specification pages 1-2, up to line 30 ("APA") in view of U.S. Pub. No. 2004/0138873 issued to Heo et al., ("Heo"), and further in view of USPubNo. 2003/0089218 issued to Gang et al., ("Gang").

As per claim 9, APA discloses "a production method of media out-put in an electronic apparatus with digital audio/video processing capability" (see Fig. 1 and items 102, 103, 104 and 106), comprising receiving audio segments and a plurality of associated audio descriptors, which describe characteristic of said audio segments, from an audio source connecting to said electronic apparatus; receiving visual segments and a plurality of associated visual descriptors, which describe characteristic of said visual segments, from a video source connecting to said electronic apparatus" (i.e., input signals and including one or more pieces of media, and supported media types include: video, music, sounds, etc.,; see page 2, lines 5-8 and Fig. 1 and item 101);

"determining a plurality of corresponding weights for each said visual segment" (i.e., analyzer includes video analyzer, soundtrack analyzer, and image analyzer. The analyzer measures of the rate of change and statistical properties of other descriptors, descriptors derived by combining two or more other descriptors; the video analyzer measures the probability that the segment of an input video contains a human face, probability that it is a natural scene, etc. The soundtrack analyzer measures audio intensity or loudness, frequency content, categorical, rate of change and statistical properties, in short, the

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analyzer receives input signal and outputs descriptors which describe features of input signal; see page 2, lines 10-16 and Fig. 1);

“extracting a visual duration, from said associated visual descriptors, for each said visual segment; extracting an audio duration, from said associated audio descriptors, for each said audio segment” (i.e., rate of change; see page 2, line 16);

“evaluating a plurality of correlating scores for respective sequences said visual segments, based on said corresponding weights, said corresponding audio durations and said corresponding visual durations; finding a sequence of visual segments with a correlating score that is the maximal within said plurality of correlating scores” (i.e., measuring the probability, segment of an input video, probability; see page 2, lines 12-14).

APA fail to explicitly disclose adjusting said audio data and said visual data to construct a media output. However, Heo discloses adjusting said audio data and said visual data to construct a media output (see Heo pp [0050]). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of APA by adjusting said audio data and said visual data to construct a media output as disclosed by Heo (see Heo pp [0049]). Such a modification would allow the method of APA to provide an audio mixed method and apparatus capable of mixing and reproducing different types of channel components without changing the channel formats of audio streams (see Heo pp [0010]), therefore, improving the accuracy of the system and method for the automatic and semi-automatic media editing.

While the combination of APA/Heo substantially discloses the claimed invention, the combination fails to disclose in detail "said weights *indicating qualities*, importance, or preference of said visual data" However, Gang discloses said weights *indicating qualities*, importance, or preference of said visual data (see Gang para [0064]). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of APA/Heo by said weights *indicating qualities*, importance, or preference of said visual data as disclosed by Gang (see Gang para 0064, particularly lines 3-6). Such a modification would allow the method of APA/Heo to provide an expected rating for every song in the

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catalog, this expected rating provides, for every song, an estimate of the degree of interest by the specific user for the specific song (see para [0012]).

As per claim 10, in addition to claim 9, APA further discloses “rendering said media output with style information to a devices with at least audio/video built in or connecting to said electronic apparatus” (i.e., outputting an edit decisions signal; see page 2, lines 20-21).

As per claims 11 and 12 in addition to claim 9, APA further discloses “receiving an audio signal from said audio source and analyzing and segmenting said audio signal for generating said audio segment and said associated audio descriptors” (i.e., measuring segment, input video and audio intensity; see page 2, lines 10-18).

As per claims 13 and 14, in addition to claim 9, APA further discloses “format of MPEG-7” input video and audio intensity; see page 2, lines 10-18).

As per claims 15-19, the limitations of claims 15-19 are similar to claims 9-14, therefore, the limitations of 15-19 are rejected in the analysis of claims 9-14, and these claims are rejected on that basis.

As per claim 20, APA discloses “a computer-readable, editing system for audio/vidé” (see Fig. 1), comprising: “a weighting processing device, determining a plurality of corresponding weights for inputted” (i.e., analyzer includes video analyzer, soundtrack analyzer, and image analyzer. The analyzer measures of the rate of change and statistical properties of other descriptors, descriptors derived by combining two or more other descriptors; the video analyzer measures the probability that the segment of an input video contains a human face, probability that it is a natural scene, etc. The soundtrack analyzer measures audio intensity or loudness, frequency content, categorical, rate of change and statistical properties, in

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short, the analyzer receives input signal and outputs descriptors which describe features of input signal; see page 2, lines 10-16 and Fig. 1);

"a correlating processing device for, correlating inputted audio data and said data corresponding weights, a plurality of inputted audio descriptors which describe characteristic of said audio data and said plurality of inputted visual descriptors which describe characteristic of said visual data" (i.e., measuring the probability, segment of an input video, probability; see page 2, lines 12-14).

APA fail to explicitly disclose a construction device for adjusting said audio data and said visual data to construct a media output. However, Heo discloses adjusting said audio data and said visual data to construct a media output (see Heo pp [0050]). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of APA by adjusting said audio data and said visual data to construct a media output as disclosed by Heo (see Heo pp [0049]). Such a modification would allow the method of APA to provide an audio mixed method and apparatus capable of mixing and reproducing different types of channel components without changing the channel formats of audio streams (see Heo pp [0010]), therefore, improving the accuracy of the system and method for the automatic and semi-automatic media editing.

While the combination of APA/Heo substantially discloses the claimed invention, the combination fails to disclose in detail "said weights *indicating qualities*, importance, or preference of said visual data" However, Gang discloses said weights *indicating qualities*, importance, or preference of said visual data (see Gang para [0064]). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of APA/Heo by said weights *indicating qualities*, importance, or preference of said visual data as disclosed by Gang (see Gang para 0064, particularly lines 3-6). Such a modification would allow the method of APA/Heo to provide an expected rating for every song in the catalog, this expected rating provides, for every song, an estimate of the degree of interest by the specific user for the specific song (see para [0012]).

As per claim 21, the limitations of claim 21 are similar to claim 20, therefore, the limitations of 21 are rejected in the analysis of claim 20, and this claim is rejected on that basis.



As per claim 22, the limitations of claim 22 are similar to claim 20, therefore, the limitations of 22 are rejected in the analysis of claim 20, and this claim is rejected on that basis.

***Allowable Subject Matter***

**Claims 1-3, 5 and 6 are allowed.**

***Response to Arguments***

In response to applicant's arguments, with respect to all pending claims (*Rejection under 35 USC 101, 103*), also Double Patenting Rejection: have been fully considered.

Persuasive with respect to claims **1-3, 5 and 6**. The rejections of claims 1-3, 5 and 6 have been withdrawn.

However, the amendment to claims 9-22 does not place the application in condition for allowance. Because the prior art of record discloses the claimed limitations as set forth.

In response to applicant's argument, "neither the Applicant's Admitted Prior Art, Heo and Gang fails to teach or suggest this feature, either alone or in combination, the independent claims." the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, *the present invention* relates to a system and method for computer generating media production. Further, in page 2, para 0003, the invention details an input signal includes one or more pieces of media, which is presented as an input to the system, in which supported media types include video, image, slideshow, music, speech, sound effects, animation and graphics.

Correspondingly, Heo discloses method and apparatus for mixing a multiplicity of audio data obtained from respective multiple channels; see para 0003.

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Gang discloses a method for the prediction of musical preferences, which is able to every song, an estimate of the degree of interest by the specific user for the specific song; para 0001 and 0012. Thus, the combination discloses the claimed limitations.

Furthermore, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

MPEP 2111: During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification" Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 162 USPQ 541,550-51 (CCPA 1969). The court found that applicant was advocating ... the impermissible importation of subject matter from the specification into the claim. See also *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definition or otherwise that may be afforded by the written description contained in application's specification.").

The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999).

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#### **CONTACT INFORMATION**

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571 – 272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571 – 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/JEAN B. FLEURANTIN/

Primary Examiner, Art Unit 2162